

REMARKS

This is in response to the Office Action dated August 25, 2004, and the references cited therewith.

Claims 36, 38, 49, and 52 are amended, and claims 70-74 are canceled; as a result, claims 1-12, 36-46, and 49-55 are now pending in this application.

Information Disclosure Statement

Applicant submitted a Supplemental Information Disclosure Statement and a 1449 Form on August 31, 2004. Applicant respectfully requests that initialed copies of the 1449 Forms be returned to Applicants' Representatives to indicate that the cited references have been considered by the Examiner.

Claim Objections

Claim 38 was objected to because of an informality. Applicant has amended claim 38 as suggested by the Examiner.

§103 Rejection of the Claims

Claims 1-7, 9-12 and 39-46 were rejected under 35 USC § 103(a) as being unpatentable over Rorvick et al. (U.S. Patent No. 6,009,348) in view of Funari (U.S. Patent No. 4,171,477).

Claims 1-7

Applicant traverses the obviousness rejection of claims 1-7 since, even if combined, the combination does not include each limitation recited in the claims and since the Office Action has not provided sufficient motivation to modify the cited reference as required to support a 35 U.S.C. § 103(a) rejection.

Claim 1 recites: A method of joining a connection member to a foil, the method comprising: positioning the connection member and the foil against each other; and forcing the connection member and the foil together between a hardened surface and a staking pin which has a tip of less than or equal to approximately 0.030" (0.762 mm) in diameter.

The Office Action admits that Rorvick does not disclose a staking pin having a tip of less than or equal to approximately 0.030" (0.762 mm) in diameter. The Office Action then asserts

that Funari discloses this subject matter. Applicant traverses. Funari discusses an electrical welder for bonding a wire to a substrate. (Abstract, Funari). Funari does not discuss joining using staking pins. Accordingly, regardless of the size of the Funari electrical welding tips, Funari does not discuss anything to do with tips of a staking pin. Moreover, Applicant cannot find in Funari a discussion of the size of his electrical welding tips. The Office Action points to col. 8, lines 13-15 and Fig. 3b for this subject matter. However, the cited sections of Funari only discuss the diameter of the wire being welded, they do not discuss the size of the welding tips. Accordingly, the subject matter of a staking pin having a tip of less than or equal to approximately 0.030" (0.762 mm) in diameter is not discussed in either reference.

Moreover, there is no motivation in the art to modify the Rorvick reference. A factor cutting against a finding of motivation to modify the prior art is when the prior art teaches away from the claimed combination. A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path the applicant took. *In re Gurley*, 27 F.3d 551, 31 USPQ 2d 1130, 1131 (Fed. Cir. 1994); *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966); *In re Spinnoble*, 405 F.2d 578, 587, 160 USPQ 237, 244 (C.C.P.A. 1969); *In re Caldwell*, 319 F.2d 254, 256, 138 USPQ 243, 245 (C.C.P.A. 1963).

In this case, Rorvick et al. relates a welding technique to minimize the "overall thickness of anode sub-assembly 170 in the regions of welds 205 and 210." (Col. 25, lines 38-39). Rorvick et al. state that in a preferred embodiment, the cold weld pins "have a diameter of about 0.060 inches." (Col. 25, line 25). Rorvick et al. then state that "no or an inappreciable net increase in anode sub-assembly 170 thickness results when cold weld geometries and formation processes are appropriately optimized." (Col 25, lines 52-54). Applicant believes this teaches away from modifying the geometry of the 0.060" weld pins of Rorvick et al. Applicant notes that if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); MPEP § 2143.01. Accordingly, one skilled in the art would not be motivated to make the asserted modification.

Moreover, the Office Action states that a "person of ordinary skill is motivated to modify Rorvick with Funari to obtain weld of desired size." This assertion is not disclosed in either

reference. As noted, one skilled in the art would be led away from such a modification of the Rorvick device, and the Funari reference discloses nothing about staking pin welds.

Accordingly, there is no motivation absent the Examiner's hindsight assertion. The Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine or modify reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002).

Reconsideration and allowance is respectfully requested.

Claims 9-12

Applicant traverses the obviousness rejection since, even if combined, the combination does not include each limitation recited in the claim. For instance, Applicant cannot find in either reference: placing the connection member against a hardened surface, placing the foil between the connection member and a staking tool, and forcing the foil into the connection member with the staking tool, as recited in claim 9. In contrast, Rorvick discusses sandwiching a tab 195d between an anode layer 185a and an anode layer 185b. (Col. 26, lines 10-16, Fig. 6C). The tab 195d is not placed against a hardened surface, it is between the two anode layers.

Claim 10-12 include each limitation of their parent claim and are therefore also not obvious in view of the cited references. Reconsideration and allowance is respectfully requested.

Claims 39-46

Applicant traverses the obviousness rejection of claims 39-46 since, even if combined, the combination does not include each limitation recited in the claims and since the Office Action has not provided sufficient motivation to modify the cited reference as required to support a 35 U.S.C. § 103(a) rejection.

Claim 39 recites: A method of joining two or more foils, the method comprising: positioning the two or more foils in a stack; and forcing the two or more foils together between a hardened surface and a staking pin which has a tip of less than approximately 0.060" (1.524 mm) in diameter.

As noted above, Funari discusses an electrical welder for bonding a wire to a substrate. Funari does not discuss joining using a staking pin. Accordingly, regardless of the size of the Funari electrical welding tips, Funari does not discuss anything to do with tips of a staking pin. Moreover, as discussed above, Applicant cannot find in Funari a discussion of the size of his electrical welding tips. Accordingly, the subject matter of a staking pin which has a tip of less than approximately 0.060" (1.524 mm) in diameter is not discussed in either reference.

Moreover, there is no motivation in the art to modify the Rorvick reference. As noted above, Rorvick et al. relates a welding technique to minimize the "overall thickness of anode sub-assembly 170 in the regions of welds 205 and 210." (Col. 25, lines 38-39). Rorvick et al. state that in a preferred embodiment, the cold weld pins "have a diameter of about 0.060 inches." (Col. 25, line 25). Rorvick et al. then state that "no or an inappreciable net increase in anode sub-assembly 170 thickness results when cold weld geometries and formation processes are appropriately optimized." (Col 25, lines 52-54). Applicant believes this teaches away from modifying the geometry of the 0.060" weld pins of Rorvick et al. Applicant notes that if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); MPEP § 2143.01. Accordingly, one skilled in the art would not be motivated to make the asserted modification.

Moreover, the Office Action states that a "person of ordinary skill is motivated to modify Rorvick with Funari to obtain weld of desired size." This assertion is not disclosed in either reference. As noted, one skilled in the art would be led away from such a modification of the Rorvick device, and the Funari reference discloses nothing about staking pin welds. Accordingly, there is no motivation absent the Examiner's hindsight assertion. The Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine or modify reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002).

Reconsideration and allowance is respectfully requested.

Claims 36-37 were rejected under 35 USC § 103(a) as being unpatentable over Elias et al. (U.S. Patent No. 5,660,737) in view of MacFarlane et al. (U.S. Patent No. 5,584,890).

Applicant has amended claim 36 to better describe the subject matter recited in the claim. Applicant believes claim 36 is not obvious in view of the cited references since, even if combined, the combination does not include each limitation recited in the claim. For instance, Applicant cannot find in either reference: edge-connecting each anode connection member to the anode connection member or connection members adjacent to each anode connection member directly along an exposed end face of each of the connection members. In contrast, Elias discusses laser welds placed along the side faces of tabs to connect the tabs to each other and to a riser 26. (Col. 5, lines 1-7).

Claim 37 includes each limitation of its parent claim and is therefore also not obvious in view of the cited references. Reconsideration and allowance is respectfully requested.

Claim 38 was rejected under 35 USC § 103(a) as being unpatentable over Elias et al. (U.S. Patent No. 5,660,737) in view of MacFarlane et al. (U.S. Patent No. 5,584,890) as applied above, and further in view of Rorvick et al. (U.S. Patent No. 6,009,348).

Claim 38 includes each limitation of its parent claim 36 and is not obvious in view of the cited references for the reasons given above for claim 36. Reconsideration and allowance is respectfully requested.

Claims 49-52 were rejected under 35 USC § 103(a) as being unpatentable over MacFarlane et al. (U.S. Patent No. 5,584,890) in view of Rorvick et al. (U.S. Patent No. 6,009,348).

Claims 49-51

Applicant has amended claim 49 to better describe the subject matter recited in the claim. Applicant believes claim 49 is not obvious in view of the cited references since, even if combined, the combination does not include each limitation recited in the claim. For instance, Applicant cannot find in either reference: staking a tab to only a first anode foil by a first stake weld using a staking tool to force the first anode foil into the tab, and staking the first anode foil to a second anode foil by a second stake weld.

Claims 50 and 51 include each limitation of their parent claim and are therefore also not obvious in view of the cited references. Reconsideration and allowance is respectfully requested.

Claim 52

Applicant has amended claim 52 to better describe the subject matter recited in the claim. Applicant believes claim 52 is not obvious in view of the cited references since, even if combined, the combination does not include each limitation recited in the claim. For instance, Applicant cannot find in either reference staking a tab to only a first anode foil by a first stake weld using a staking tool to force the first anode foil into the tab, and staking the first anode foil to a second anode foil by a second stake weld. Reconsideration and allowance is respectfully requested.

Claim 53 was rejected under 35 USC § 103(a) as being unpatentable over MacFarlane et al. (U.S. Patent No. 5,584,890) in view of Rorvick et al. (U.S. Patent No. 6,009,348) as applied above, and further in view of Funari (U.S. Patent No. 4,171,477). Claim 53 includes each limitation of its parent claim 52 and is therefore also not obvious in view of the cited references for the reasons given above. Reconsideration and allowance is respectfully requested.

Claims 8 and 54 was rejected under 35 USC § 103(a) as being unpatentable over Rorvick et al. (U.S. Patent No. 6,009,348) in view of Funari (U.S. Patent No. 4,171,477) or MacFarlane et al. (U.S. Patent No. 5,584,890) in view of Rorvick et al. (U.S. Patent No. 6,009,348), as applied above, and further in view of Strange et al. (U.S. Patent No. 6,299,752).

Claims 8 and 54 include each limitation of their respective parent claims and are not obvious in view of the cited references for the reasons given above for their parent claims since the secondary reference does not overcome the deficiencies of the primary references discussed above. Reconsideration and allowance is respectfully requested.

Claim 55 was rejected under 35 USC § 103(a) as being unpatentable over MacFarlane et al. (U.S. Patent No. 5,584,890) in view of Rorvick et al. (U.S. Patent No. 6,009,348) as applied above, and further in view of Elias et al. (U.S. Patent No. 5,660,737).

Claim 55 include each limitation of parent claim 52 and is not obvious in view of the cited reference for the reasons given above for parent claim 52. Reconsideration and allowance is respectfully requested.

Claims 70, 73 and 74 were rejected under 35 USC § 103(a) as being unpatentable over Strange et al. (U.S. Patent No. 6,299,752).

Claim 71 was rejected under 35 USC § 103(a) as being unpatentable over Strange et al. (U.S. Patent No. 6,299,752) as applied above, and further in view of MacFarlane et al. (U.S. Patent No. 5,584,890)

Claim 72 was rejected under 35 USC § 103(a) as being unpatentable over Strange et al. (U.S. Patent No. 6,299,752) as applied above, and further in view of Akami et al. (U.S. Patent No. 6,375,688).

Applicant has cancelled claims 70-74 without prejudice or disclaimer.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 359-3267 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 25 day of January, 2005.

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